

Notice of Allowability

Application No.

10/812,471

Examiner

Ernest Unelus

Applicant(s)

CHANG ET AL.

Art Unit

2181

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 02/27/07.
2. ☒ The allowed claim(s) is/are 1 and 8-12.
3. ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some* c) ☐ None of the:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

- | | |
|--|---|
| 1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 5. <input type="checkbox"/> Notice of Informal Patent Application |
| 2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 6. <input type="checkbox"/> Interview Summary (PTO-413),
Paper No./Mail Date _____ |
| 3. <input type="checkbox"/> Information Disclosure Statements (PTO/SB/08),
Paper No./Mail Date _____ | 7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment |
| 4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit
of Biological Material | 8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance |
| | 9. <input type="checkbox"/> Other _____ |

DETAILED ACTION

I. EXAMINER'S AMENDMENT

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.
2. Authorization for this examiner's amendment was given in a telephone interview with Mr. John Schaefer (Reg. No. 47,921) on March 27, 2007. The examiner proposed amendments to better place the application in condition for allowance, particularly adding the limitation that prior arts fail to teach. Mr. Schaefer agreed.
3. The application has been amended as follows:
4. **Claim 1** has been amended to include the limitation as discloses below;
5. **Claim 1** (currently amended) A memory card having a SECURE DIGITAL (SD) interface at one end and a MEMORY STICK (MS) interface at the opposite end for communicating with an SD card reader and an MS card reader respectively, comprising;
a function module;
a controller coupled to the function module for accessing;
an SD I/O buffer coupled to the controller for sending a command (CMD) control signal, the SD I/O buffer including a first pull-down resistor for providing a first voltage level to the CMD control signal; and
an MS I/O buffer coupled to the controller for sending a bus status (BS) control signal, the MS

Art Unit: 2181

I/O buffer including a first pull-up resistor for providing a second voltage level to the BS control signal,

wherein, when the memory card is inserted into an SD card reader having a second pull-up resistor, the first pull-down resistor and the second pull-up resistor are coupled to provide the CMD control signal with a high voltage level, wherein the controller determines that the memory card is inserted into an SD card reader and thus enables the SD interface for communicating with the SD card reader, and

wherein, when the memory card is inserted into an MS card reader having a second pull-down resistor, the first pull-up resistor and the second pull-down resistor are coupled to provide the BS control signal with a low voltage level, wherein the controller determines that the memory card is inserted into an MS card reader and thus enables the MS interface for communicating with the MS card reader.

II. RELEVANT ART CITED BY THE EXAMINER

6. The following prior art made of record and not relied upon is cited to establish the level of skill in the applicant's art and those arts considered reasonably pertinent to applicant's disclosure. See **MPEP 707.05(c)**.

7. The following reference teaches of a memory card having multiple interfaces.

U.S. PATENT NUMBER

US 6,097,883

US 6,857,038

US 7,149,836

III. REASONS FOR ALLOWANCE

8. Claims 1 and 8-12 are allowed.

9. The following is an examiner's statement of reasons for allowance:

The primary reasons for allowance of claim 1 in the instant application is the combination with the inclusion in the claim that "wherein, when the memory card is inserted into an SD card reader having a second pull-up resistor, the first pull-down resistor and the second pull-up resistor are coupled to provide the CMD control signal with a high voltage level, wherein the controller determines that the memory card is inserted into an SD card reader and thus enables the SD interface for communicating with the SD card reader, and wherein, when the memory card is inserted into an MS card reader having a second pull-down resistor, the first pull-up resistor and the second pull-down resistor are coupled to provide the BS control signal with a low voltage level, wherein the controller determines that the memory card is inserted into an MS card reader and thus enables the MS interface for communicating with the MS card reader". The prior art of record neither anticipates nor renders obvious the above-recited combination.

10. Per the instant office action, claims 1 and 8-12 (Now renumbered to claims 1-6) are considered as allowable subject matter.

11. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Art Unit: 2181

DIRECTION OF FUTURE CORRESPONDENCES

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ernest Unelus whose telephone number is (571) 272-8596. The examiner can normally be reached on Monday to Friday 9:00 AM to 5:00 PM.

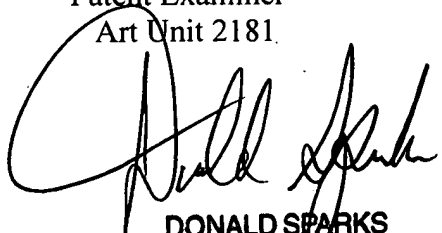
IMPORTANT NOTE

13. If attempts to reach the above noted Examiner by telephone are unsuccessful, the Examiner's supervisor, Mr. Donald Sparks, can be reached at the following telephone number: Area Code (571) 272-4201.

The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PMR system, see [her//pair-direct.uspto.gov](http://pair-direct.uspto.gov). Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217- 91 97 (toll-free).

March 28, 2007

Ernest Unelus
Patent Examiner
Art Unit 2181



DONALD SPARKS
SUPERVISORY PATENT EXAMINER